FOLDING COLLAPSIBLE EXERCISING APPARATUS

BACKGROUND AND SUMMARY OF THE INVENTION

The present invention relates to an exercising apparatus for exercising the head, the back, the hip, the arms, and the legs, and more particularly to such an exercising apparatus that can be conveniently collapsed by hand without the use of any hand tool.

FIG. 1 shows an exercising apparatus according to the prior art. This structure of exercising apparatus comprises a base frame, a bench supported on the base frame, a headrest disposed near one end of the bench, and two leg bars bilaterally disposed at the bottom side of the bench remote from the headrest. This structure of exercising apparatus occupies much storage space when not in use. Further, this structure of exercising apparatus has no damper means to impart a resisting force to the user.

It is one object of the present invention to provide an exercising apparatus, which can be conveniently collapsed by hand without the use of any hand tool. It is another object of the present invention to provide a folding collapsible exercising apparatus, which gives a resisting force to the user when operated. It is still another object of the present invention to provide a folding collapsible exercising apparatus, which can be conveniently adjusted to fit different users. According to one aspect of the present invention, the folding collapsible exercising apparatus comprises a front base frame having a first U-shaped support and a second U-shaped support, a rear base frame slidably inserted into one end of the front base frame and locked at the desired length by a lock pin, a footboard unit pivoted to lugs at the rear base frame by locked at the desired angle by a lock pin, a seat pivoted to the second U-shaped support and locked in position by a lock pin, a supporting bar pivoted to the second U-shaped support and locked in position by a lock pin, a back support pivoted to the first U-shaped support, two elastic members bilaterally coupled between the supporting bar and the back support, a back mattress pivoted to the back support and locked in position by a lock pin, and a headrest slidably coupled to the back mattress and locked in position by a lock pin. According to another aspect of the present invention, the folding collapsible exercising apparatus can be folded up and set into a flat manner after removal of the respective lock pins. According to still another aspect of the present invention, two elastic pull cord members are bilaterally coupled to respective locating rings at a transverse bar at the front base frame for pulling with the hands.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an elevational view of an exercising apparatus according to the prior art.

FIG. 2 is an exploded view of a folding collapsible exercising apparatus according to the present invention (the rubber pull cord members excluded).

FIG. 3 is a perspective assembly view of the folding collapsible exercising apparatus according to the present invention.

FIG. 4 is another perspective assembly view of the folding collapsible exercising apparatus according to the present invention when viewed from another angle.

FIG. 5 shows the folding collapsible exercising apparatus collapsed according to the present invention.

FIG. 6 shows an application example of the present invention (the rubber pull cord members not used).

FIG. 7 shows another application example of the present invention (the rubber pull cord members not used).

FIG. 8 shows still another application example of the present invention (the rubber pull cord members not used).

FIG. 9 shows still another application example of the present invention (the rubber pull cord members used).

FIG. 10 shows still another application example of the present invention (the rubber pull cord members used).

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figures from 2 through 10, a folding collapsible exercising apparatus in accordance with the present invention is generally comprised of a front base frame 1, a rear base frame 2, a footboard unit 3, a seat 4, a supporting bar 5, two elastic members 50, a back support 6, a back mattress 7, and a headrest unit 8.

The front base frame 1 comprises a hollow main shaft 12 connected to the rear base frame 2, a transverse bar 11 perpendicularly connected to one end of the main shaft 12 remote from the rear base frame 2, a first U-shaped support 121 and a second U-shaped support 123 formed integral with the main shaft 12 at the top side, and two rollers 111 at two opposite ends of the transverse bar 11 for enabling the front base frame 1 to be conveniently moved on the floor. The second U-shaped support 123 comprises two first lock holes 1231 aligned on the two opposite upright sidewalls at the front side near the top, and two second lock holes 1232 aligned on the two opposite upright sidewalls at the rear side near the top. The rear base frame 2 is inserted into the main shaft 12 of the front base frame 1, comprising a longitudinal series of locating holes 21 selectively fastened to the hollow main shaft 12 by a lock pin 22, a cross bar 23 for supporting the rear base frame 2 on the floor, and two parallel lugs 24 for holding the foot board unit 3. The lugs 24 have a Plurality of locating holes 241 symmetrically disposed at different angles. The footboard unit 3 comprises a footboard 32, and a stem 31 extended from the footboard 32 at one side and pivoted to the rear base frame 2 and selectively fastened to the locating holes 241 at the desired angle by a lock pin 25. The seat 4 comprises a seat tube 41 pivoted to the second U-shaped support 123 by a pivot 14. When in use, a lock pin 15 is inserted into the two second lock holes 1232 on the second U-shaped support 123 to lock the seat 4 in position. The supporting bar 5 has a bottom end 51 pivoted to the second U-shaped support 123 by a pivot 124, a lock hole connected to the first lock holes 1231 on the U-shaped support 123 at the main shaft 12 of the front base frame 1 by a lock pin 13, and two pegs 52 respectively formed integral with two opposite lateral sidewalls thereof. The back support 6 has a bottom end 61 pivoted to the first U-shaped support 121 at the main shaft 12 of the front base frame 1 by a pivot 122, a flanged top end 64 pivoted to the back mattress 7, and two pegs 62 formed integral with two opposite sidewalls thereof on the middle. The elastic members 50 are bilaterally coupled between the back support 6 and the supporting bar 5, each having a first end 501 coupled to one ped 52 at the supporting bar 5 and a second end 502 coupled to one peg 62 at the back support 6. After installation of the elastic members 50, retainers 53 and 63 are respectively fastened to the pegs 52 at the supporting bar 5 and the pegs 62 at the back support 6 to secure the elastic members 50 in place. The back mattress 7 comprises a mattress body 72, a hollow mounting bar 71 longitudinally disposed at the back side of the mattress body 72 and pivoted to the back support 6 by a pivot 712, two handgrips 711 perpendicularly extended